



## FEDERAL COMMUNICATIONS COMMISSION

### 47 CFR Part 10

[Public Safety and Homeland Security Bureau: PS Docket Nos. 15-91, 15-94; FCC 22-31: FR ID 85971]

### Wireless Emergency Alerts

**AGENCY:** Federal Communications Commission.

**ACTION:** Notice of proposed rulemaking.

**SUMMARY:** This Further Notice of Proposed Rulemaking (Further Notice) seeks comment on proposals to develop performance metrics and reporting standards to measure the reliability, speed, and accuracy of the provision of Wireless Emergency Alerts (WEA), in order to identify issues with and improve the WEA system. This document also seeks comment on how Participating Commercial Mobile Service (CMS) Providers should measure the performance of their WEA service to improve the provision of WEA. By this action, the Commission affords interested parties an opportunity to submit comments. Through this action, the Commission hopes to collect data on the provision of WEA in order to empower state and local alert originators to more fully and better use the WEA system.

**DATES:** Comments are due on or before **[30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** and reply comments are due on or before **[60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

**ADDRESSES:** You may submit comments, identified by PS Docket No. 15-91, and PS Docket No 15-94, by any of the following methods:

- **Electronic Filers:** Comments may be filed electronically using the Federal Communications Commission's Electronic Comment Filing System (ECFS) at: <https://apps.fcc.gov/ecfs/>.

- Paper Filers: Comments may be filed in paper by sending an original and one copy of each filing.

All filings must be addressed to the FCC's Secretary: Office of the Secretary, Federal Communications Commission. Filings can be sent by commercial carrier, or by U.S. Postal Service mail.

- Comments sent using commercial carrier other than U.S. Postal Service mail, must be addressed to 9050 Junction Drive, Annapolis, MD 20701.
- Comments sent using the U.S. Postal Service first-class, Express, or Priority mail, must be addressed to 45 L Street NE, Washington, DC 20554.

Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19. See FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy, Public Notice, DA-20-304 (March 19, 2020), <https://www.fcc.gov/document/fcc-closes-headquarters-open-window-and-changes-hand-delivery-policy>.

People with Disabilities: To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), please send an email to: FCC504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice) or 202-418-0432 (TTY).

For detailed instructions for submitting comments and additional information on the rulemaking process, see the **SUPPLEMENTARY INFORMATION** section of this document.

**FOR FURTHER INFORMATION CONTACT:** For further information, contact James Wiley, Public Safety and Homeland Security Bureau, Cybersecurity and Communications Reliability Division, at (202) 418-1678, or by email to [james.wiley@fcc.gov](mailto:james.wiley@fcc.gov), or David Kirschner, Public Safety and Homeland Security Bureau, Cybersecurity and Communications Reliability Division, at (202) 418-0695, or by email to [david.kirschner@fcc.gov](mailto:david.kirschner@fcc.gov).

**SUPPLEMENTARY INFORMATION:** This is a summary of the Commission's Further Notice, FCC 22-31, released on April 21, 2022. The full text of this document is available at: <https://www.fcc.gov/document/fcc-proposes-public-wireless-emergency-alerts-performance-reporting-0>.

In this Further Notice in PS Docket Nos. 15-91, and 15-94, the Commission seeks comment on proposals to amend the Part 10 rules governing Wireless Emergency Alerts (47 CFR part 10).

## **SYNOPSIS**

The Commission seeks to improve WEA effectiveness through the development of performance metrics and reporting standards. The Commission proposes that Participating CMS Providers file public reports with the Commission on important attributes of WEA's performance: its reliability, speed, and accuracy. The Commission seeks comment on how to define and measure the reliability, speed, and accuracy of WEAs. The Commission seeks comment on how Participating CMS Providers should measure WEA performance and generate WEA performance reports. The Commission seeks comment on whether these reports should be based on tests or data from real-time WEA use. The Commission seeks comment on when and how these reports should be provided to the Commission. The Commission seeks comment on whether Participating CMS Providers should provide locality-specific WEA performance reporting. The Commission seeks comment on what information Participating CMS Providers would need to collect to assess WEA performance and whether it already is possible to collect the requisite information. If Participating CMS Providers currently cannot collect information necessary to assess WEA performance, the Commission seeks comment on what changes would be necessary to comply with these reporting requirements. The Commission seeks comment on whether information about how, when, and where alerts are being delivered to devices would be beneficial to emergency managers that are evaluating WEA's effectiveness. The Commission seeks comment on whether Participating CMS Providers should offer WEA-capable mobile

devices that automatically report WEA performance information. The Commission seeks comment on the steps need to be taken to have mobile devices log and report WEA performance information, and how long it would take to implement. The Commission seeks comment on whether there are consumer privacy concerns associated with the automatic reporting of WEA performance information from WEA-capable mobile devices. The Commission seeks comment on the costs associated with Participating CMS Providers' production of WEA performance reports. The Commission seeks comment on the effect of our proposals would have on the level of participation in WEA. The Commission seeks comment on ways to further improve WEA. The Commission seeks comment on how non-Participating CMS providers deliver WEA alerts and on what factors they depend on to provide wireless emergency alerts.

### **Initial Regulatory Flexibility Analysis**

As required by the Regulatory Flexibility Act of 1980, as amended (RFA), the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in the Further Notice. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the Further Notice. The Commission will send a copy of the Further Notice, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA). In addition, the Further Notice and IRFA (or summaries thereof) will be published in the Federal Register.

#### **A. Need for, and Objectives of, the Proposed Rules**

In the Further Notice, the Commission seeks to improve the effectiveness of WEA by building upon and refreshing the record on the Commission's prior proposals to require commercial mobile service (CMS) providers participating in WEA (Participating CMS Providers) to file with the Commission, public reports on WEA's reliability, speed, and accuracy. Further, we seek to strengthen WEA's effectiveness through the development of

performance metrics and reporting standards that will help emergency management and other stakeholders understand the effectiveness of WEA in their particular area, and identify areas where improvement is needed. More specifically, in the Further Notice we propose that CMS providers who choose to participate in WEA file public reports with the Commission on important attributes of WEA's performance and comment on (1) how WEA's reliability, speed, and accuracy should be defined, and whether these are the most pertinent measures of WEA's performance; (2) how Participating CMS Providers should measure performance of WEA for the purpose of generating WEA performance reports; (3) how and when WEA performance reports should be provided to the Commission; (4) whether WEA performance reports should include information collected at the consumer's device, including information about the actual time and location of alert receipt, and whether consumer devices should automatically report this information to Participating CMS Providers; and, (5) how the Commission can further improve WEA's speed and reliability based on the findings of the 2021 nationwide WEA test. We believe that having empirical data on WEA's reliability, speed, and accuracy, and developing a shared understanding among emergency management agencies and the public regarding the system's capabilities will help promote and increase emergency managers' use of WEA during emergencies and other critical situations which will save lives. We also believe that our actions will help increase public confidence in WEA.

## **B. Legal Basis**

The proposed action is taken pursuant to sections 1, 2, 4(i), 4(o), 301, 303(r), 303(v), 307, 309, 335, 403, 624(g), 706, and 715 of the Communications Act of 1934, as amended, 47 U.S.C. 151, 152, 154(i), 154(o), 301, 301(r), 303(v), 307, 309, 335, 403, 544(g), 606, and 615, as well as by sections 602(a),(b),(c), (f), 603, 604, 605 and 606 of the WARN Act, 47 U.S.C. 1202(a),(b),(c), (f), 1203, 1204, 1205 and 1206.

## **C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply**

The RFA directs agencies to provide a description of and, where feasible, an estimate of, the number of small entities that may be affected by the proposed rules, if adopted. The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.” In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act. A “small business concern” is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.

Small Businesses, Small Organizations, Small Governmental Jurisdictions. Our actions, over time, may affect small entities that are not easily categorized at present. We therefore describe here, at the outset, three broad groups of small entities that could be directly affected herein. First, while there are industry specific size standards for small businesses that are used in the regulatory flexibility analysis, according to data from the Small Business Administration’s (SBA) Office of Advocacy, in general a small business is an independent business having fewer than 500 employees. These types of small businesses represent 99.9% of all businesses in the United States, which translates to 32.5 million businesses.

Next, the type of small entity described as a “small organization” is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.” The Internal Revenue Service (IRS) uses a revenue benchmark of \$50,000 or less to delineate its annual electronic filing requirements for small exempt organizations. Nationwide, for tax year 2020, there were approximately 447,689 small exempt organizations in the U.S. reporting revenues of \$50,000 or less according to the registration and tax data for exempt organizations available from the IRS.

Finally, the small entity described as a “small governmental jurisdiction” is defined generally as “governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand.” U.S. Census Bureau data from

the 2017 Census of Governments indicate that there were 90,075 local governmental jurisdictions consisting of general purpose governments and special purpose governments in the United States. Of this number there were 36,931 general purpose governments (county, municipal and town or township) with populations of less than 50,000 and 12,040 special purpose governments - independent school districts with enrollment populations of less than 50,000. Accordingly, based on the 2017 U.S. Census of Governments data, we estimate that at least 48,971 entities fall into the category of “small governmental jurisdictions.”

Wireless Telecommunications Carriers (except Satellite). This industry comprises establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves. Establishments in this industry have spectrum licenses and provide services using that spectrum, such as cellular services, paging services, wireless internet access, and wireless video services. The SBA size standard for this industry classifies a business as small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2017 show that there were 2,893 firms in this industry that operated for the entire year. Of that number, 2,837 firms employed fewer than 250 employees. Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 797 providers that reported they were engaged in the provision of wireless services. Of these providers, the Commission estimates that 715 providers have 1,500 or fewer employees. Consequently, using the SBA’s small business size standard, most of these providers can be considered small entities.

Broadband Personal Communications Service. The broadband personal communications services (PCS) spectrum encompasses services in the 1850-1910 and 1930-1990 MHz bands. The closest industry with a SBA small business size standard applicable to these services is Wireless Telecommunications Carriers (except Satellite). The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire

year. Of this number, 2,837 firms employed fewer than 250 employees. Thus, under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

Based on Commission data as of November 2021, there were approximately 5,060 active licenses in the Broadband PCS service. The Commission's small business size standards with respect to Broadband PCS involve eligibility for bidding credits and installment payments in the auction of licenses for these services. In auctions for these licenses, the Commission defined "small business" as an entity that, together with its affiliates and controlling interests, has average gross revenues not exceeding \$40 million for the preceding three years, and a "very small business" as an entity that, together with its affiliates and controlling interests, has had average annual gross revenues not exceeding \$15 million for the preceding three years. Winning bidders claiming small business credits won Broadband PCS licenses in C, D, E, and F Blocks. In frequency bands where licenses were subject to auction, the Commission notes that as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, since the Commission does not collect data on the number of employees for licensees providing these, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard.

Narrowband Personal Communications Services. Narrowband Personal Communications Services (Narrowband PCS) are PCS services operating in the 901-902 MHz, 930-931 MHz, and 940-941 MHz bands. PCS services are radio communications that encompass mobile and ancillary fixed communication that provide services to individuals and businesses and can be integrated with a variety of competing networks. Wireless Telecommunications Carriers (except Satellite) is the closest industry with an SBA small business size standard applicable to these



services. The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year. Of this number, 2,837 firms employed fewer than 250 employees. Thus, under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

According to Commission data as of December 2021, there were approximately 4,211 active Narrowband PCS licenses. The Commission's small business size standards with respect to Narrowband PCS involve eligibility for bidding credits and installment payments in the auction of licenses for these services. For the auction of these licenses, the Commission defined a "small business" as an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$40 million. A "very small business" is defined as an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$15 million. Pursuant to these definitions, 7 winning bidders claiming small and very small bidding credits won approximately 359 licenses. One of the winning bidders claiming a small business status classification in these Narrowband PCS license auctions had an active license as of December 2021.

In frequency bands where licenses were subject to auction, the Commission notes that as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, since the Commission does not collect data on the number of employees for licensees providing these services, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard.

Wireless Communications Services. Wireless Communications Services (WCS) can be used for a variety of fixed, mobile, radiolocation, and digital audio broadcasting satellite services. Wireless spectrum is made available and licensed for the provision of wireless communications services in several frequency bands subject to Part 27 of the Commission's rules (47 CFR part 27). Wireless Telecommunications Carriers (except Satellite) is the closest industry with an SBA small business size standard applicable to these services. The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year. Of this number, 2,837 firms employed fewer than 250 employees. Thus, under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

The Commission's small business size standards with respect to WCS involve eligibility for bidding credits and installment payments in the auction of licenses for the various frequency bands included in WCS. When bidding credits are adopted for the auction of licenses in WCS frequency bands, such credits may be available to several types of small businesses based average gross revenues (small, very small and entrepreneur) pursuant to the competitive bidding rules adopted in conjunction with the requirements for the auction and/or as identified in the designated entities section in Part 27 of the Commission's rules for the specific WCS frequency bands.

In frequency bands where licenses were subject to auction, the Commission notes that as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, since the Commission does not collect data on the number of employees for licensees providing these

services, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard.

700 MHz Guard Band Licensees. The 700 MHz Guard Band encompasses spectrum in 746-747/776-777 MHz and 762-764/792-794 MHz frequency bands. Wireless Telecommunications Carriers (except Satellite) is the closest industry with an SBA small business size standard applicable to licenses providing services in these bands. The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year. Of this number, 2,837 firms employed fewer than 250 employees. Thus, under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

According to Commission data as of December, 2021, there were approximately 224 active 700 MHz Guard Band licenses. The Commission's small business size standards with respect to 700 MHz Guard Band licensees involve eligibility for bidding credits and installment payments in the auction of licenses. For the auction of these licenses, the Commission defined a "small business" as an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years, and a "very small business" an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years. Pursuant to these definitions, five winning bidders claiming one of the small business status classifications won 26 licenses, and one winning bidder claiming small business won two licenses. None of the winning bidders claiming a small business status classification in these 700 MHz Guard Band license auctions had an active license as of December 2021.

In frequency bands where licenses were subject to auction, the Commission notes that as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service.

Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, since the Commission does not collect data on the number of employees for licensees providing these services, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard.

Lower 700 MHz Band Licenses. The lower 700 MHz band encompasses spectrum in the 698-746 MHz frequency bands. Permissible operations in these bands include flexible fixed, mobile, and broadcast uses, including mobile and other digital new broadcast operation; fixed and mobile wireless commercial services (including FDD- and TDD-based services); as well as fixed and mobile wireless uses for private, internal radio needs, two-way interactive, cellular, and mobile television broadcasting services. Wireless Telecommunications Carriers (except Satellite) is the closest industry with an SBA small business size standard applicable to licenses providing services in these bands. The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year. Of this number, 2,837 firms employed fewer than 250 employees. Thus, under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

According to Commission data as of December 2021, there were approximately 2,824 active Lower 700 MHz Band licenses. The Commission's small business size standards with respect to Lower 700 MHz Band licensees involve eligibility for bidding credits and installment payments in the auction of licenses. For auctions of Lower 700 MHz Band licenses the Commission adopted criteria for three groups of small businesses. A very small business was defined as an entity that, together with its affiliates and controlling interests, has average annual gross revenues not exceeding \$15 million for the preceding three years, a small business was defined as an entity that, together with its affiliates and controlling interests, has average gross revenues not exceeding \$40 million for the preceding three years, and an entrepreneur was

defined as an entity that, together with its affiliates and controlling interests, has average gross revenues not exceeding \$3 million for the preceding three years. In auctions for Lower 700 MHz Band licenses seventy-two winning bidders claiming a small business classification won 329 licenses, twenty-six winning bidders claiming a small business classification won 214 licenses, and three winning bidders claiming a small business classification won all five auctioned licenses.

In frequency bands where licenses were subject to auction, the Commission notes that as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, since the Commission does not collect data on the number of employees for licensees providing these services, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard.

Upper 700 MHz Band Licenses. The upper 700 MHz band encompasses spectrum in the 746-806 MHz bands. Upper 700 MHz D Block licenses are nationwide licenses associated with the 758-763 MHz and 788-793 MHz bands. Permissible operations in these bands include flexible fixed, mobile, and broadcast uses, including mobile and other digital new broadcast operation; fixed and mobile wireless commercial services (including FDD- and TDD-based services); as well as fixed and mobile wireless uses for private, internal radio needs, two-way interactive, cellular, and mobile television broadcasting services. Wireless Telecommunications Carriers (except Satellite) is the closest industry with an SBA small business size standard applicable to licenses providing services in these bands. The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year. Of that number, 2,837 firms employed fewer than 250 employees. Thus, under the SBA

size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

According to Commission data as of December, 2021, there were approximately 152 active Upper 700 MHz Band licenses. The Commission's small business size standards with respect to Upper 700 MHz Band licensees involve eligibility for bidding credits and installment payments in the auction of licenses. For the auction of these licenses, the Commission defined a "small business" as an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years, and a "very small business" an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years. Pursuant to these definitions, three winning bidders claiming very small business status won five of the twelve available licenses.

In frequency bands where licenses were subject to auction, the Commission notes that as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, since the Commission does not collect data on the number of employees for licensees providing these services, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard.

Advanced Wireless Services (AWS) - (1710–1755 MHz and 2110–2155 MHz bands (AWS-1); 1915–1920 MHz, 1995–2000 MHz, 2020–2025 MHz and 2175–2180 MHz bands (AWS-2); 2155–2175 MHz band (AWS-3); 2000-2020 MHz and 2180-2200 MHz (AWS-4)). Spectrum is made available and licensed in these bands for the provision of various wireless communications services. Wireless Telecommunications Carriers (except Satellite) is the closest industry with an SBA small business size standard applicable to these services. The SBA small

business size standard for this industry classifies a business as small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year. Of this number, 2,837 firms employed fewer than 250 employees. Thus, under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

According to Commission data as December, 2021, there were approximately 4,472 active AWS licenses. The Commission's small business size standards with respect to AWS involve eligibility for bidding credits and installment payments in the auction of licenses for these services. For the auction of AWS licenses, the Commission defined a "small business" as an entity with average annual gross revenues for the preceding three years not exceeding \$40 million, and a "very small business" as an entity with average annual gross revenues for the preceding three years not exceeding \$15 million. Pursuant to these definitions, 57 winning bidders claiming status as small or very small businesses won 215 of 1,087 licenses. In the most recent auction of AWS licenses, 15 of 37 bidders qualifying for status as small or very small businesses won licenses.

In frequency bands where licenses were subject to auction, the Commission notes that as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, since the Commission does not collect data on the number of employees for licensees providing these services, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard.

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Broadband Radio Service and Educational Broadband Service. Broadband Radio Service systems, previously referred to as Multipoint Distribution Service (MDS) and Multichannel Multipoint Distribution Service (MMDS) systems, and "wireless cable," transmit video

programming to subscribers and provide two-way high speed data operations using the microwave frequencies of the Broadband Radio Service (BRS) and Educational Broadband Service (EBS) (previously referred to as the Instructional Television Fixed Service (ITFS)). Wireless cable operators that use spectrum in the BRS often supplemented with leased channels from the EBS, provide a competitive alternative to wired cable and other multichannel video programming distributors. Wireless cable programming to subscribers resembles cable television, but instead of coaxial cable, wireless cable uses microwave channels.

In light of the use of wireless frequencies by BRS and EBS services, the closest industry with a SBA small business size standard applicable to these services is Wireless Telecommunications Carriers (except Satellite). The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year. Of this number, 2,837 firms employed fewer than 250 employees. Thus, under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

According to Commission data as December, 2021, there were approximately 5,869 active BRS and EBS licenses. The Commission's small business size standards with respect to BRS involves eligibility for bidding credits and installment payments in the auction of licenses for these services. For the auction of BRS licenses, the Commission adopted criteria for three groups of small businesses. A very small business is an entity that, together with its affiliates and controlling interests, has average annual gross revenues exceed \$3 million and did not exceed \$15 million for the preceding three years, a small business is an entity that, together with its affiliates and controlling interests, has average gross revenues exceed \$15 million and did not exceed \$40 million for the preceding three years, and an entrepreneur is an entity that, together with its affiliates and controlling interests, has average gross revenues not exceeding \$3 million for the preceding three years. Of the ten winning bidders for BRS licenses, two bidders claiming



the small business status won 4 licenses, one bidder claiming the very small business status won three licenses and two bidders claiming entrepreneur status won six licenses. One of the winning bidders claiming a small business status classification in the BRS license auction has an active license as of December, 2021.

The Commission's small business size standards for EBS define a small business as an entity that, together with its affiliates, its controlling interests and the affiliates of its controlling interests, has average gross revenues that are not more than \$55 million for the preceding five (5) years, and a very small business is an entity that, together with its affiliates, its controlling interests and the affiliates of its controlling interests, has average gross revenues that are not more than \$20 million for the preceding five (5) years. In frequency bands where licenses were subject to auction, the Commission notes that as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, since the Commission does not collect data on the number of employees for licensees providing these services, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard.

The Educational Broadcasting Services. Cable-based educational broadcasting services fall under the broad category of the Wired Telecommunications Carriers industry. The Wired Telecommunications Carriers industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services,

including Voice over Internet Protocol (VoIP) services; wired (cable) audio and video programming distribution; and wired broadband Internet services.”

The SBA small business size standard for this industry classifies businesses having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year. Of this total, 2,964 firms operated with fewer than 250 employees. Thus, under this size standard, the majority of firms in this industry can be considered small. Additionally, according to Commission data as of December, 2021, there were 4,477 active EBS licenses. The Commission estimates that the majority of these licenses are held by non-profit educational institutions and school districts and are likely small entities.

Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing. This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment. The SBA small business size standard for this industry classifies businesses having 1,250 employees or less as small. U.S. Census Bureau data for 2017 show that there were 656 firms in this industry that operated for the entire year. Of this number, 624 firms had fewer than 250 employees. Thus, under the SBA size standard, the majority of firms in this industry can be considered small.

Software Publishers. This industry comprises establishments primarily engaged in computer software publishing or publishing and reproduction. Establishments in this industry carry out operations necessary for producing and distributing computer software, such as designing, providing documentation, assisting in installation, and providing support services to software purchasers. These establishments may design, develop, and publish, or publish only. The SBA small business size standard for this industry classifies businesses having annual

receipts of \$41.5 million or less as small. U.S. Census Bureau data for 2017 indicate that 7,842 firms in this industry operated for the entire year. Of this number 7,226 firms had revenue of less than \$25 million. Based on this data, we conclude that a majority of firms in this industry are small.

Noncommercial Educational (NCE) and Public Broadcast Stations. Noncommercial educational broadcast stations and public broadcast stations are television or radio broadcast stations which under the Commission's rules are eligible to be licensed by the Commission as a noncommercial educational radio or television broadcast station and are owned and operated by a public agency or nonprofit private foundation, corporation, or association; or are owned and operated by a municipality which transmits only noncommercial programs for education purposes.

The SBA small business size standards and U.S. Census Bureau data classify radio stations and television broadcasting separately and both categories may include both noncommercial and commercial stations. The SBA small business size standard for both radio stations and television broadcasting classify firms having \$41.5 million or less in annual receipts as small. For Radio Stations, U.S. Census Bureau data for 2017 show that 1,879 of the 2,963 firms that operated during that year had revenue of less than \$25 million per year. For Television Broadcasting, U.S. Census Bureau data for 2017 show that 657 of the 744 firms that operated for the entire year had revenue of less than \$25,000,000. While the U.S. Census Bureau data does not indicate the number of non-commercial stations, we estimate that under the applicable SBA size standard the majority of noncommercial educational broadcast stations and public broadcast stations are small entities.

According to Commission data as of September 2021, there were 4,595 licensed noncommercial educational radio and television stations. There were also 2,276 low power television stations, including Class A stations (LPTV) and 3,106 TV translator stations. The Commission does not compile and otherwise does not have access to financial information for

these stations that permit it to determine how many stations qualify as small entities under the SBA small business size standards. However, given the nature of these services, we will presume that all noncommercial educational and public broadcast stations qualify as small entities under the above SBA small business size standards.

**D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities**

We expect the actions proposed in the Further Notice, if adopted, will impose additional reporting, recordkeeping and/or other compliance obligations on small as well as other entities who report to the Commission on the performance of their WEA service. The Further Notice seeks to refresh the record to develop metrics for WEA performance and reporting. Specifically, we seek comment on whether Participating CMS Providers should report to the Commission on the reliability, speed, and accuracy of their WEA service, and if so, on when and how the reports should be provided to the Commission, on how Participating CMS Providers should gather that data necessary to compile those performance reports, and on how WEA reports should quantify these key performance metrics. We also inquire whether there are other or additional measures of WEA's performance that are relevant to emergency management agencies and the public that the Commission should consider as a reporting requirement.

In assessing the cost of compliance for small entities, at this time the Commission cannot quantify the cost of compliance for small entities and is not in a position to determine whether, if adopted, compliance with any WEA performance reporting or other requirements will require small entities to hire professionals. The Commission sought detailed comment on the costs of WEA performance reporting in the 2016 WEA R&O and FNPRM, but did not receive any responsive comments on this issue. However, in 2021, the Commission estimated that the total annual cost of compliance with its WEA election requirements for the industry would be \$1 million, which was approved by the Office of Management and Budget. This cost estimate included the total effort required by Participating CMS Providers to assess the extent of their

readiness to participate in WEA and report such to new and existing subscribers and the Commission. Accordingly regarding costs, the Further Notice seeks comment on: (1) the costs associated with Participating CMS Providers' production of WEA performance reports, (2) whether its prior \$1 million estimate is a reasonable cost ceiling for CMS Providers to generate and submit WEA performance tests because both lines of effort entail reporting and analysis of WEA-related network infrastructure, (3) whether in the alternative, the cost to establish and report on the results of E911 location accuracy testing would be a more accurate analog to the cost of reporting on WEA's performance, and (4) whether standards revisions or software and firmware updates to CMS network equipment and mobile devices may be necessary to log WEA performance data. We expect the comments we receive to include information addressing costs which will help the Commission identify and evaluate relevant issues for small entities, including compliance costs and other burdens that may result from any WEA performance reporting requirements that may be adopted in this proceeding, before adopting final rules.

**E. Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered**

The RFA requires an agency to describe any significant, specifically small business alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): “(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for such small entities; (3) the use of performance, rather than design, standards; and (4) and exemption from coverage of the rule, or any part thereof, for such small entities.”

The Commission seeks comment on steps that it could take to limit the burden of WEA performance reporting. It seeks comment on the extent to which the Commission could limit the overall economic impact of WEA performance reporting by providing increased flexibility for

businesses identified as small by the Small Business Administration or by limiting the applicability of the requirement to only the three nationwide CMS Providers.

Building on the Commission's prior proposals and its objective to refresh the record to develop metrics for WEA performance and reporting, in the Further Notice the Commission does not propose to set minimum performance benchmarks which could adversely affect small entities. Instead, we seek to identify key reporting metrics that will help stakeholders develop an understanding of WEA end-to-end performance. The Commission also seeks comment on steps that it could take to limit the burden of WEA performance reporting as a general matter, which could help minimize the economic impact of any adopted WEA performance reporting requirements on small entities. Further, specifically targeting small entities, we seek comment on the extent to which the Commission could limit the overall economic impact of WEA performance reporting by providing increased flexibility for businesses identified as small by the SBA, or by limiting the applicability of the requirement to only the three nationwide CMS Providers.

In the Further Notice, the Commission also identifies alternative approaches on several matters that might minimize the economic impact for small entities. While seeking comment on how to define reliability, speed, and accuracy for WEA, the Commission inquires whether the definitions it proposed in the 2016 WEA R&O and FNPRM best capture the definitions for reliability, speed, and accuracy of WEA. As part of this inquiry, in the alternative we seek comment on: (1) whether WEA's reliability should be defined as the proportion of devices within the targeted area while the alert is active that successfully displayed the alert, (2) whether WEA's speed should be measured as the difference between the time that an alert is initiated by an authorized alert originator and the time that the alert is displayed at the mobile device, (3) whether WEA's accuracy should be defined as the proportion of alert recipients that received the alert within and further than 0.1 miles from the target area, and (4) whether reliability, speed, and accuracy are the most pertinent measures of WEA's performance to emergency management

agencies and the public.

Similarly, the Commission seeks comment in the Further Notice on how Participating CMS Providers should measure the performance of their WEA service for the purpose of generating WEA performance reports noting that in the 2016 WEA R&O and FNPRM we previously proposed that Participating CMS Providers be required to submit WEA performance reports based on aggregated data from all WEA activations during the reporting period. In the alternative, we inquire whether the Commission should: (1) allow performance reports to be based on discrete WEA tests conducted by Participating CMS Providers in partnership with federal, state, or local emergency management agencies in a representative sample of dense urban, urban, suburban and rural geographic environments, or (2) require WEA performance reports to be based on aggregated data from real-time WEA use and how this would be implemented. Regarding how and when performance reports should be provided to the Commission, as an alternative to our 2016 proposal to require Participating CMS Providers to report on the performance of their WEA service annually, or to require a single report and additional reports only in response to “material” network upgrades, in the Further Notice as a step to limit the burden of reporting while still gaining visibility into end-to-end WEA performance, we inquire whether to require Participating CMS Providers to submit multiple reports, such as a series of three reports, and whether the submission of performance reports should coincide with any particular developments or milestones. The Commission expects to more fully consider the economic impact and alternatives for small entities following the review of comments filed in response to the Further Notice.

**F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules**

None.

**Initial Paperwork Reduction Act of 1995 Analysis**

The Further Notice may contain potential new or revised information collection requirements. Therefore, we seek comment on potential new or revised information collections

subject to the Paperwork Reduction Act of 1995. If the Commission adopts any new or revised information collection requirements, the Commission will publish a notice in the **Federal Register** inviting the general public and the Office of Management and Budget to comment on the information collection requirements, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4), we seek specific comment on how we might further reduce the information collection burden for small business concerns with fewer than 25 employees.

### **Comments and Reply Comments**

Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 CFR 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated in the **DATES** section above. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). See Electronic Filing of Documents in Rulemaking Proceedings, 63 FR 24121 (1998), <https://transition.fcc.gov/Bureaus/OGC/Orders/1998/fcc98056.pdf>.

### **Ex Parte Rules**

This Further Notice shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's ex parte rules. Persons making ex parte presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral ex parte presentations are reminded that memoranda summarizing the presentation must: (1) List all persons attending or otherwise participating in the meeting at which the ex parte presentation was made; and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda, or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph



numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during ex parte meetings are deemed to be written ex parte presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written ex parte presentations and memoranda summarizing oral ex parte presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's ex parte rules.

### **Ordering Clauses**

Accordingly, IT IS ORDERED, pursuant to Sections 1, 2, 4(i), 4(o), 301, 303(r), 303(v), 307, 309, 335, 403, 624(g), 706, and 715 of the Communications Act of 1934, as amended, 47 U.S.C. 151, 152, 154(i), 154(o), 301, 301(r), 303(v), 307, 309, 335, 403, 544(g), 606, and 615, as well as by sections 602(a),(b),(c), (f), 603, 604, 605, and 606 of the WARN Act, as amended, 47 U.S.C. 1202(a),(b),(c), (f), 1203, 1204, 1205, and 1206, that the Further Notice in PS Docket No. 15-91 and 15-94 IS HEREBY ADOPTED.

IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Further Notice, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

### **FEDERAL COMMUNICATIONS COMMISSION**

Marlene Dortch,  
Secretary.